

McPherson County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/28/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 23 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the McPherson County economy.¹

These 23 sectors have a total direct output of approximately **\$628.4 million** and support **2,198.8 jobs** in McPherson County. Running the model for all 23 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall McPherson County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	2,198.8	9.19%	\$128,267,245	4.96%	\$628,399,231	24.29%
Indirect Effect	510.3	2.13%	\$37,895,307	1.47%	\$75,777,524	2.93%
Induced Effect	379.8	1.59%	\$21,871,118	0.85%	\$40,573,805	1.57%
Total Effect	3,088.9	12.91%	\$188,033,670	7.27%	\$744,750,560	28.79%

As shown in the above table, agriculture, food, and food processing sectors support **3,088.9 jobs**, or **12.91%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$744.8 million, roughly 28.79% of the economy.**

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 23 agriculture, food, and food processing sectors is approximately **\$188.0 million**, or **7.27% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **7.27% of the total economy.**

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **697.6 employees**. This table also shows the amount of jobs that are created by the agriculture industry in McPherson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	697.6	\$68,737,926
Farm machinery and equipment manufacturing	307.1	\$170,810,528
Grain farming	267.1	\$81,671,533
Landscape and horticultural services	240.5	\$9,157,035
All other industrial machinery manufacturing	225.5	\$59,769,883
All other crop farming	105.3	\$6,620,474
Support activities for agriculture and forestry	85.2	\$8,408,359
Frozen specialties manufacturing	60.9	\$21,942,449
Veterinary services	50.8	\$4,304,035
Real estate	49.2	\$4,742,666

The farm machinery and equipment manufacturing sector directly contributes approximately **\$170.8 million** to the McPherson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Farm machinery and equipment manufacturing	307.1	\$170,810,528
Grain farming	267.1	\$81,671,533
Wet corn milling	35.2	\$75,485,134
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	697.6	\$68,737,926
All other industrial machinery manufacturing	225.5	\$59,769,883
Flour milling	36.8	\$54,804,932
Animal, except poultry, slaughtering	30.8	\$22,943,606
Oilseed farming	24.1	\$22,321,097
Frozen specialties manufacturing	60.9	\$21,942,449
Other animal food manufacturing	7.8	\$10,958,607

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the McPherson County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	24.1	\$22,321,096.42
Grain farming	267.1	\$81,671,531.68
Vegetable and melon farming	0.1	\$23,083.22
Fruit farming	0.1	\$5,755.12
Greenhouse, nursery, and floriculture production	5.8	\$798,465.97
All other crop farming	105.3	\$6,620,473.86
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	697.6	\$68,737,922.67
Dairy cattle and milk production	13.6	\$4,745,105.27
Poultry and egg production	2.5	\$1,824,992.66
Animal production, except cattle and poultry and eggs	44.7	\$4,948,502.54
Commercial logging	2.5	\$106,019.21
Other animal food manufacturing	7.8	\$10,958,606.72
Flour milling	36.8	\$54,804,935.46
Wet corn milling	35.2	\$75,485,137.94
Frozen specialties manufacturing	60.9	\$21,942,449.57
Animal, except poultry, slaughtering	30.8	\$22,943,605.42
Bread and bakery product, except frozen, manufacturing	18.9	\$2,135,340.69
Frozen cakes and other pastries manufacturing	1.1	\$166,414.63
Tortilla manufacturing	20.1	\$4,118,312.36
Farm machinery and equipment manufacturing	307.1	\$170,810,531.62
All other industrial machinery manufacturing	225.5	\$59,769,882.20
Veterinary services	50.8	\$4,304,035.19
Landscape and horticultural services	240.5	\$9,157,034.87

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to McPherson County, the retail sector was omitted.